RULES

OF

TENNESSEE DEPARTMENT OF AGRICULTURE DIVISION OF MARKETING

CHAPTER 0080-5-6 SEED REGULATIONS

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0080-5-6-.01 METHODS OF INSPECTING, SAMPLING AND TESTING, AND THE APPLICATION OF TOLERANCES. Method of inspecting, sampling and testing, and the application of tolerance shall be according to the Rules for Testing Seeds adopted by the "Association of Official Seed Analysts" except tolerances are not allowed for Prohibited Noxious-Weed Seeds.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. Administrative History: Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.02 LABELS.

(1) Hybrid corn seed containing Texas Male Sterile Cytoplasm shall be labeled to show the percentage of this Cytoplasm expressed by the symbol (T*) in parentheses immediately following the variety name. This asterisk (*) shall refer to a statement on the front panel of the seed label stating the percentage (%) of seed in the lot with Texas Male Sterile Cytoplasm. This information shall be printed in type no smaller than that used for the variety and kind name. (T*) shall be disassociated from the variety name by use of parentheses, brackets, quotes, or spaces.

EXAMPLES:

(a) Kind, Corn

Variety, 704 (T*)

100% T-Cytoplasm (any place on front of analysis tag)

(Note: Reference to separate tag permitted, e.g., "see separate tag.")

(b) Kind, Corn

Variety, 704 (T*)

*50% T-Cytoplasm (any place in front of analysis tag.)

(Note: Reference to separate tag permitted, e.g., "see separate tag.")

Note: 704 is used as a fictitious variety name in label example.

(2) A complete analysis must be given and the purity test percentage must total one-hundred (100%) percent. Blank spaces on a tag or label shall be considered equivalent to the word "None". Either numerals or the word "none" should be used to express a percentage or numbers per pound.

(Rule 0080-5-6-.02, continued)

(3) Abbreviations in labeling seed is not permissible.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.03 INVOICES. All invoices and records pertaining to the shipment or sale of seed must show the lot numbers, except when sold to the ultimate consumer.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.04 LABELING OF SEED DISTRIBUTED TO WHOLESALERS. After seed has been conditioned, it must be labeled before distribution to any person including a wholesaler. Each bag or bulk lot must be completely labeled when supplied to a retailer or consumer. Labeling of seed supplied to or owned by a wholesaler (one whose predominant business is to supply seed to other distributors rather than to consumers of seed) may be by a master tag or laboratory report accompanying the invoice, provided each bag or other container is clearly identified by a lot number or if the seed is in bulk. Each bag or container that is not so identified must carry complete labeling.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. Administrative History: Original rule certified June 5, 1974. Amendmentfiled October 30, 1986; effective December 14, 1986.

0080-5-6-.05 LABELING TREATED SEED. Any agricultural or vegetable seed for seeding purposes, that has been treated:

(1) Shall be labeled in type no smaller than eight points to indicate that such seed has been treated and to show the name of any substance or a description of any process (other than application of a substance) used to treat such seed, for example

Treated with _		
	(Name of substance or process)	
or		treated
	(Name of substance or process)	

If the substance used in such treatment in the amount remaining with the seed is harmful to humans or other vertebrate animals, the seed shall also bear a label containing statements as specified by paragraphs (3) and (4) below. The label shall contain the required information in any form that is clearly legible and complies with this regulation. The information may be on the analysis tag, on a separate tag or printed on the container in a conspicuous manner.

- (2) Name of substance the name of any substance as required by paragraph (1) of this section shall be the commonly accepted coined, chemical (generic), or abbreviated chemical name. Commonly accepted coined names are not private trademarks and are free for use by the public and are commonly recognized as names of particular substances such as thiram, captan, lindane, and dichlone. Examples of commonly accepted chemical (generic) names are: bluestone, calcium carbonate, cuprous oxide, zinc hydroxide, hexachlorobenzene and ethyl mercury acetate. The terms "mercury" or "mercurial" may be used to represent all types of mercurial compounds. Examples of commonly accepted abbreviated chemical names are: BHC (1, 2, 3, 4, 5, 6, Hexachloroclolexane) and DDT (dichloro diphenyl trichloroethane).
- (3) Mercurials and similarly toxic substances -

(Rule 0080-5-6-.05, continued)

(a) Seeds treated with a mercurial or similarly toxic substance, if any amount whatsoever remains with the seed, shall be labeled to show a representation of a skull and crossbones at least twice the size of the type used for information required to be on the label under paragraph (1) and shall also include in red letters on a background of distinctly contrasting color a statement substantially as follows: "Treated with Poison," "Poison Treated," or "Poison." Such treatment shall appear in type no smaller than eight points.

- (b) Substances similarly toxic to mercurials include the following: Aldrin (technical), Demeton, Dieldrin, Endrin, Heptachlor, 0, O-diethyl S (ethylthiomethyl) phosphorodithiolate and 0, O-diethyl S-2 (ethylthion) ethyl Phosphorodithiolate. Any amount of such substances remaining with the seed shall be considered harmful to humans and other vertebrate animals.
- Other harmful substances If any substance, other than one which would be classified as a mercurial or similarly toxic substance under paragraph (3) is used in the treatment of seed; the amount remaining with the seed is considered harmful to humans or other vertebrate animals unless the seed is in containers of four ounces or less. Seed treated with such substances shall be labeled with an appropriate caution statement in type no smaller than eight points worded substantially as follows: "Do not use for food, feed, or oil purposes." This paragraph applies to all chemical substances not within paragraph (3) except that the following substances shall not be deemed harmful when present at a rate less than the number of parts per million indicated:

Allethrin - 2 p.p.m.

Malathion - 8 p.p.m.

Methoxyclor - 2 p.p.m.

Piperonyl butoxide - 20 p.p.m. except 8 p.p.m. on Oat and Sorghum

Pyrethrins - 3 p.p.m. except I p.p.m. on Oat and Sorghum

(5) Furnigants which leave no residue on the seed shall not be deemed harmful, therefore need not be included on label.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. Administrative History: Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.06 HYBRID LABELING.

- (1) Hybrid kinds or varieties of seed which contain between 90% to 95% hybrid, as a result of incompletely controlled pollination, shall be labeled with percentages of both the hybrid and also the non-hybrid components shown on the tag. No one kind or variety of seed shall be labeled as hybrid if the pure seed contains less than 90% hybrid seed. If the seed contains 95% of the pure seed which is hybrid seed the actual percentage which is hybrid may be omitted but the seed must be labeled as a hybrid.
- (2) Exemption to hybrid labeling: Hybrid wheat shall be labeled the same as all other hybrids except that wheat shall be considered a hybrid if the seed contains 75% or more of the pure seed which is hybrid.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.07 NOXIOUS-WEED SEEDS. The following kinds of weed seed are designated noxious in Tennessee and the maximum permitted rate of occurrence per pound or agricultural or vegetable seed is established.

(1) Prohibited Noxious-Weed seed shall include:

Balloonvine (Cardiospermurn halicacabum)	None per pound
Canada thistle (Cirsiurn arvense)	None per pound
Crotalaria (Crotalaris spectabilis)	None per pound
Field Bindweed (Convolvulus arvensis)	None per pound
Hedge Bindweed (Convolvulus sepium)	None per pound
Itchgrass (Rottboelia exaltata)	None per pound
Johnsongrass (Sorghum halepense)	None per pound
Nutgrass (Cyperus rotundus & C. esculentus)	None per pound
Sorghum Almurn (Sorghum almum)	None per pound
Sicklepod (Cassia obtusifolia)	None per pound

(2) Restricted Noxious-Weed seed shall include:

Buckhorn Plantain (Plantago lanceolata)	200 per pound
Cheat (Bromus secalinus) or Chess (B. commutatus)	300 per pound
Cocklebur (Xanthiurn spp.)	2 per pound
CorncockIe (Agrostemma githago)	100 per pound
Darnel (Loliurn temulentum)	100 per pound
Dock (Rumex spp.)	100 per pound
Dodder (Cuscuta spp.)	100 per pound
Giant Foxtail (Setaria faberi)	100 per pound
Horsenettle (Solanum carolinense)	200 per pound
Quackgrass (Agropyron repens)	100 per pound
Wild Mustard or Turnips (Brassica spp.)	27 per pound
Wild Onion or Garlic (Alliurn spp.)	27 per pound
Plumeless thistles, includes Musk Thistle, Nodding Thistle, and Curled	
Thistle (Carduus spp.)	100 per pound
Annual Bluegrass (Poa annua)	300 per pound
	Lawn and turf seed only

- (3) Annual Bluegrass shall be claimed on the label if present in lawn and turf seed such as, bentgrass, Ky. bluegrass, chewings fescue, red fescue, hard fescue, varieties of perennial ryegrass, varieties of turf type tall fescue, and/or mixtures containing these grasses.
- (4) Agricultural seed which contain in excess of a sum total of 300 restricted noxious-weed seed per pound (subject to above limitations) is prohibited from sale in Tennessee.

(5) Exceptions:

- (a) Crimson clover may contain one hundred (100) Brassica spp. seed per pound.
- (b) Ky. 31 Tall fescue may contain a sum total of five hundred (500) restricted noxious-weed seed per pound. However, maximum limitations for each kind remain the same.
- (c) Black soybeans used for hay purposes may contain two (2) sicklepod per pound.

(Rule 0080-5-6-.07, continued)

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. Administrative History: Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.08 MINIMUM STANDARD OF GERMINATION AND PURITY. Agricultural seed is prohibited from being sold, offered or exposed for sale for sowing purposes in Tennessee if:

- (1) The percentage of germination is below 75%.
 - (a) Exceptions.
 - 1. Hybrid field corn shall not germinate less than 90%.
 - 2. Dallisgrass shall not germinate less than 30%.
 - 3. Sweetclover shall not germinate less than 65%.
 - 4. Crownvetch shall not germinate less than 65%.
 - 5. Pearl millet shall not germinate less than 65%.
- (2) The percentage of weed seed is more than 2% or the percentage of purity is below 90%.
 - (a) Exceptions.

1.	Dallisgrass	50%
2.	Orchardgrass	85%
3.	Redtop Grass	87%
4.	Bluegrass	75%

- (b) Coated seed may have a purity of less than 90%.
- (3) The percentage of inert material is more than 10%.
 - (a) Exceptions.
 - 1. Dallisgrass
 - 2. Orchardgrass
 - 3. Redtop Grass
 - 4. Bluegrass

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.09 STANDARDS FOR VEGETABLE SEEDS.

(1) The standard of germination for vegetable seeds shall be the same as listed in the Federal Seed Act, and as may be subsequently amended, and which, presently, are as listed below. For seed which germinate less than these standards, the words "Below Standard" must be printed on each package or container or tag in not less than eight point type:

	PERCENT
Artichoke	60
Asparagus	70
Asparagusbean	75
Bean, garden	70
Bean, lima	70
Bean, runner	75
Beet	65
Broadbean	75
Broccoli	75
Brussell sprouts	70
Burdock, great	60
Cabbage	75
Cabbage, tronchuda	75
Cantaloupe (See Muskmelon)	
Cardoon	60
Carrot	55
Cauliflower	75
Celeriac	55
Celery	55
Chard, Swiss	65
Chicory	65
Chinese cabbage	75
Chives	50
Citron	65
Collards	80
Corn, sweet	75
Cornsalad	70
Cowpea	75
Cress, garden	75
Cress, upland	60
Cress, water	40
Cucumber	80
Dandelion	60
Eggplant	60
Endive	70
Kale	75
Kale, Chinese	75
Kohlrabi	75
Leek	60
Lettuce	80
Muskmelon	75
Mustard, India	75
Mustard, spinach	75
Okra	50
Onion	70

(Rule 0080-5-6-.09, continued)

Onion, Welsh	70
Pak-Choi	75
Parsley	60
Parsnip	60
Pea	80
Pepper	55
Popcorn	75
Pumpkin	75
Radish	75
Rhubarb	60
Rutabaga	75
Salsify	75
Sorrell	65
Soybean	75
Spinach	60
Spinach, New Zealand	40
Squash	75
Tomato	75
Tomato, husk	50
Turnip	80
Watermelon	70
All other vegetable seeds	50

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.10 HERMETICALLY SEALED CONTAINERS. For agricultural and vegetable seeds labeled and packed in hermetically sealed containers the nine (9) month limitation of date of test in Section 10 (a) (2) is extended as provided therein. The germination test for agricultural and vegetable seeds shall have been completed within twentyfour (24) month period, exclusive of the calendar month in which the test was completed, if the following conditions are met:

- (1) The seed was packaged within nine (9) months after harvest.
- (2) The container used does not allow water vapor penetration through any wall, including the seals, greater than 0.05 grams of water per 24 hours per 100 square inches of surface at 100 degrees Fahrenheit with a relative humidity on one side of 90 percent and on the other side of 0.00 percent. Water vapor penetration of WVP is measured by the Standards of the U.S. Bureau of Standards as: gm. H20/24 hr/100 sq. in. /100 deg. F. / 90% RHV .0% RH
- (3) The seed in the container used does not exceed the percentage of moisture, on a wet weight basis, as listed below:

AGRICULTURAL SEEDS	PERCENT
Beet, Field	7.5
Beet, Sugar	7.5
Bluegrass, Kentucky	6.0
Clover, Crimson	8.0
Fescue, Red	8.0
Ryegrass, Annual	8.0
Ryegrass, Perennial	8.0
All others	6.0

(Rule 0080-5-6-.10, continued)

Mixture of above

8.0

VEGETABLE SEEDS

PERCENT

Bean, Garden

Bean, Lima

Beet

Broccoli

Brussels Sprouts

Cabbage

Carrot

Cauliflower

Celeriac

Celery

Chard, Swiss

Chinese Cabbage

Chives

Collards

Corn, Sweet

Cucumber

Eggplant

Kale

Kohlrabi

Leek

Lettuce

Muskmelon

Mustard, India

Onion

Onion, Welsh

Parsley

Parsnip

Pea

Pepper

Pumpkin

Radish

Rutabaga

Spinach

Squash

Tomato

Turnip

Watermelon

All others

- (4) The container is conspicuously labeled in not less than 8 point type to indicate:
 - (a) That the seed is hermetically sealed,
 - (b) That the seed has been preconditioned as to moisture content.
 - (c) The calendar month and year in which the germination test was completed as well as all labeling information required in Section 4 of the Tennessee Seed Law.

(Rule 0080-5-6-.10, continued)

(d) The percentage of germination of seed at the time of packaging was equal to or above the Standards specified elsewhere in this regulation.

(e) Records are kept giving the percent of moisture at the time of packaging.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. Administrative History: Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.11 LABELING REQUIREMENTS FOR MIXTURES. For all mixtures the oldest date tested for any component will be considered the date of test.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14,1986.

0080-5-6-.12 LABELING REQUIRMENTS FOR AGRICULTURAL SEEDS THAT ARE COATED.

- (1) Percentage of pure seeds with coating material removed.
- (2) Percentage of coating material shall be shown as a separate item in close association with the percentage of inert matter.
- (3) Germination shall be determined on pellets with or without seed.
- (4) In addition to these provisions, labeling of coated seed shall comply with the requirements of Sections 6 and 7 of this Chapter.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. Administrative History: Original rule certified June5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.13 NOTICE TO COMMON CARRIERS. Express and freight shipments, including truck deliveries, to dealers or consumers of seed shall be subject to the Tennessee Seed Law and its rules and regulations. All trucks and other common carriers transporting seed for delivery or sale, or to be sold or delivered to consumers in this State, in the usual manner, or on the public highways or at public auctions, shall have available for examination at any time a bill of lading, waybill, or delivery receipt showing the following:

- (1) The name of shipper or party from whom purchased;
- (2) The name and address of the party to whom the seed is to be delivered.
- (3) The kind, variety and quantity of each separate lot of seed;
- (4) The name and address of truck line or owner, or driver of the truck or other common carrier making delivery or transporting the seed.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5,1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.14 PAYMENT OF INSPECTION FEES BY REPORTING SYSTEM. Each seedsman shall make application to the Commissioner for a permit to report the quantity of seed sold and to pay the inspection fees applicable under the Tennessee Seed Law. The Commissioner may grant, in his discretion, the permit bearing an assigned number. Upon granting such permit, the Commissioner shall require each seedsman to keep such records as may be necessary to indicate accurately the quantity of seeds and container weights sold. Such records shall be

(Rule 0080-5-6-.15, continued)

made available to the Commissioner or his duly authorized representative at any and all reasonable hours for the purpose of making such examination as is necessary to verify the quantity of seed sold and the fees paid. Each seedsman shall report quarterly on forms furnished by the Commissioner the quantity and container weights of seeds sold. The reports shall be on the 15th of January, April, July and October. If the report is not filed and the inspection fees are not paid by the 10th day following due date, a penalty of ten percent (10%) shall be added to the inspection fees due. Reports shall be filed each quarter whether or not any sales were made during the reporting period.

The seedsman whose name appears on the analysis label affixed to the bag at time of sale will be responsible for the inspection fees. However, in cases when a licensed Tennessee seedsman purchases or receives agricultural or vegetable seeds for seeding purposes from a seedsman located outside the State of Tennessee, the fee may be paid by either seedsman, but final responsibility rests with the Tennessee seedsman. Invoices pertaining to the sale of seed shall indicate which seedsman is responsible for reporting and paying the inspection fee by showing the statement "Tennessee Inspection Fee Paid" or "Tennessee Inspection Fee Not Paid - Responsibility of Purchaser." Any subsequent sale of seed on which the fee has been reported and paid will not be subject to further reporting fees.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.15 SEED INSPECTION FEES FOR SEEDS IN SMALL CONTAINERS. For agricultural or vegetable seeds in containers of five (5) pounds or less not sold by the case:

- (1) Agricultural or vegetable seeds sold in individual containers, with a wholesale value of fifteen dollars (\$15.00) or greater, shall be paid at three (3) cents for each container.
- (2) Agricultural or vegetable seeds sold in individual containers, of less than fifteen dollars (\$15.00) wholesale value, shall be exempt.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.16 LABELING OF BULK SEEDS. Agricultural seeds offered or exposed for sale which are stored in bulk, shall be labeled by attaching to the bin, tank, box or other container in a conspicuous place, a tag or label stating the information as required by Sections 5 through 9 of this Chapter. Copy of same shall also be supplied to each purchaser at time of sale.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. Administrative History: Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.

0080-5-6-.17 BRAND LABELING. If a brand name is used, it must be a separate statement from the variety name or statement of a mixture unless it is a registered trademark. Brand names may not be used in conjunction with "Variety Not Stated" labeling.

Authority: T.C.A. §43-928, Public Chapter 660 of 1986. **Administrative History:** Original rule certified June 5, 1974. Amendment filed October 30, 1986; effective December 14, 1986.